## A.D. 1803 . . . . . . . N° 2691.

# SPECIFICATION

OF

## ROBERT CLARK.

## TRUSS.

LONDON:
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# A.D. 1803 . . . . . . . Nº 2691.

## Truss.

### CLARK'S SPECIFICATION.

**TO ALL TO WHOM THESE PRESENTS SHALL COME,** I, Robert Clark, of No. 5, Fitzroy Place, Fitzroy Square, in the Parish of Saint Pancras, in the County of Middlesex, Instrument Maker, send greeting.

**WHEREAS** His most Excellent Majesty King George the Third, by His Letters Patent under the Great Seal of the United Kingdom of Great Britain and Ireland, bearing date at Westminster, the Twenty-third day of March, in the forty-third year of His said Majesty's reign, did give and grant unto me, the said Robert Clark, my executors, administrators, and assigns, His especial licence that I, my executors, administrators, and assigns, deputy or deputies, servants or agents, or such others as I, my executors, administrators, or assigns, should at any time agree with, during the term of years therein expressed, should and lawfully might make, use, exercise, and vend, within that part of the United Kingdom of Great Britain and Ireland called England, His Dominion of Wales, and Town of Berwick-upon-Tweed, an Invention of "Certain New Improvements in the Construction of a Truss, to be worn in case of Rupture, by means of which the Pad or Bolster of the Truss will always keep it's Place, notwithstanding any Motion of the Body or Limbs of the Wearer;" in which said Letters Patent there is contained a proviso that if I, the said Robert Clark, shall not particularly describe and ascertain the nature of my said Invention, and in what manner the same is to be performed, by an instrument in writing under my hand and seal, and cause the same be enrolled in His Majesty's High Court of Chancery within one calendar month next after the date of the said Letters Patent, that then the said Letters Patent, and all liberties and advantages thereby granted, should cease, determine, and be void, as in and by the said Letters Patent, relation being thereunto had, may more fully and at large appear.

**NOW KNOW YE**, that in compliance with the said proviso, I, the said Robert Clark, do hereby declare that the said Invention, and the manner in which the same is to be performed, is described and ascertained by the Drawing or Plan, and description thereof, with the references thereto hereinafter contained.

In witness whereof, I have hereunto set my hand and seal, this Twenty-second day of April, in the year of our Lord One thousand eight hundred and three.

The Invention and improvements for which the Patent is claimed are three, videlicet:—

First, the circular motion, of which the plate B is capable on it's centre, and which allows the pad, with it's adjustments, to be placed immediately to it's required bearing.

Second, the sliding motion allowed to the pad, by which means the pad remains firmly held to the required part, independent of the irregular motions of the body.

Third, the application of the lever to the instrument, and which, with a screw adjustment, produces a pressure on the pad, which can be increased or diminishe at pleasure.

## Description of the Truss, it's several Parts, their Arrangement and Uses.

The body spring A, with the buckle and roller at one end of it, and a strap at the other to attach the instrument to the body with, is as in common with other trusses. B, Fig. 1, is a geometrical representation of a circular plate, which is fixed on the body spring of the truss with a screw and collet (*d*, Fig. 2). On this plate are fixed two bars, edgewise, and parrallel to each other (*a*, *a*, Fig. 1), to either end of which the rest of the apparatus may occasionally be fixed. (*b*, *b*,) are circular slits or apertures made near the circumference of the plate, and which allows it the motion described in the first part of the claim; the screws (*c*, *c*,) with their collets being fixed to the body spring. B, Fig. 2, is a profile of the same Plate, shewing the manner in which it is fixed to the body spring, and the profile or side view of the bars (*a*, *a*). C, Fig. 1, represents a frame, having the half of a double joint at one of it's extremities (*e*), and that of a single joint at the other (*f*). The end (*e*) of this frame may occasionally be applied to either end of the bars (*a*, *a*,) of the plate B. C, Fig. 2, is a profile view of the same plate. D, Fig. 1, represents an apparatus, with rollers, to prevent friction, which is attached to and slides on the frame C on one side, and on the other carries the pad; (*m*, *m*,) are the rollers, and (*n*) the piece through which the screw passes, by which it is attached to frame C. D, Fig. 2' is a longitudinal section of the same piece, shewing in (*m*, *m*,) the position of the rollers; in (*n* and *o*) the screw, with the nut and collet which attaches it to B, and in (*p*) a small left-handed and flat-headed screw, which, being screwed into the end of the screw (*n*), prevents it from unscrewing itself; (*r*) represents the screw on the under side of the piece D, and on which the pad is fixed. Fig. 3 is a profile view of the piece D. E, Fig. 1, is a steel spring, the end (*s*) of which is fixed to the extremity (*f*) of the frame C, and having at it's upper end a roller (*t*) to prevent friction. E, Fig. 2, is a profile view of the piece E. F is a lever, having an adjusting screw *x* through one of its extremities, and is fixed to the extremity (*e*) of the frame C, the screw which fixes it then becoming it's fulcrum. G, Fig. 1, represents the front of the pad, and Fig. 2 a section of it, shewing at (*w*) the female screw by which it is attached to the screw (*r*) of the piece D. These several pieces fixed together after this method and order, form an apparatus which is represented in perspective, with the addition of the strap, buckle, &c., in the Drawing annexed to this Specification, and in which the several parts are respectively marked with the same letters which are already used to distinguish them separately.

The means by which those effects of the instrument are produced, which are herein claimed as original, may in this Figure be clearly observed.

When the apparatus is attached to the body by the strap and buckle, on screwing the button *x* of the lever, that end of it through which the screw passes will be drawn up, and of consequence the other will be depressed; its depression will operate on the spring E, which, being connected with the frame C, &c., to which the pad is screwed, communicates a pressure to the pad, which is evidently to be regulated by the motion of the adjusting screw (*x*). Z is a screw inserted near the end (*f*) of the piece C, and which being elevated increases the action of the spring, and vice versa. The irregular motions of the body do not affect the stability of the pad in this truss, on account of the sliding motion it has in the piece C, as thus:—The pad is attached to the apparatus at the under side or back of the piece C, by means of a screw and collet, and which, in order to assist the motion required between the pad and the apparatus, is provided with rollers to prevent friction, as represented in the first and second figures of D. The pad, together with D, in most cases preserves it's stability with respect to the body, and allows the piece C, and the rest of the apparatus to move along its screw, &c. But there are some cases in which it is necessary to the convenience of the wearer that the apparatus, as far down as and including the piece C, do remain at rest with respect to the body, and the pad, together with D, receive a motion from the body, and move up or down the piece C, and which is accomplished by this application of the piece D.

Lastly, the pad may be set immediately to it's required bearing by the motion of which the plate B is capable on it's centre within the limits of the groove ($b$, $b$,) on the screws ($c$, $c$).

R. (L.S.) CLARK.

Sealed and delivered (being first duly stamped) in the presence of (the word "pad," in the fifteenth line of the within-written Indenture being first written on an erasure,

C. Blunt,
Mathemathical Instrument Maker,
35, Great Russell Street,
Bedford Square.

Saml Collingridge,
Lothbury,
Gentleman.

**AND BE IT REMEMBERED**, that on the same Twenty-second day of April, in the year above mentioned, the aforesaid Robert Clark came before our Lord the King in His Chancery, and acknowledged the Specification aforesaid, and all and every thing therein contained, in form above written. And also the Specification aforesaid was stamped according to the tenor of the Statute in that case made and provided.

Inrolled the same Twenty-second day of April, in the year above written.

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A.D. 1803 March 23. Nº 2691.
CLARK'S SPECIFICATION.
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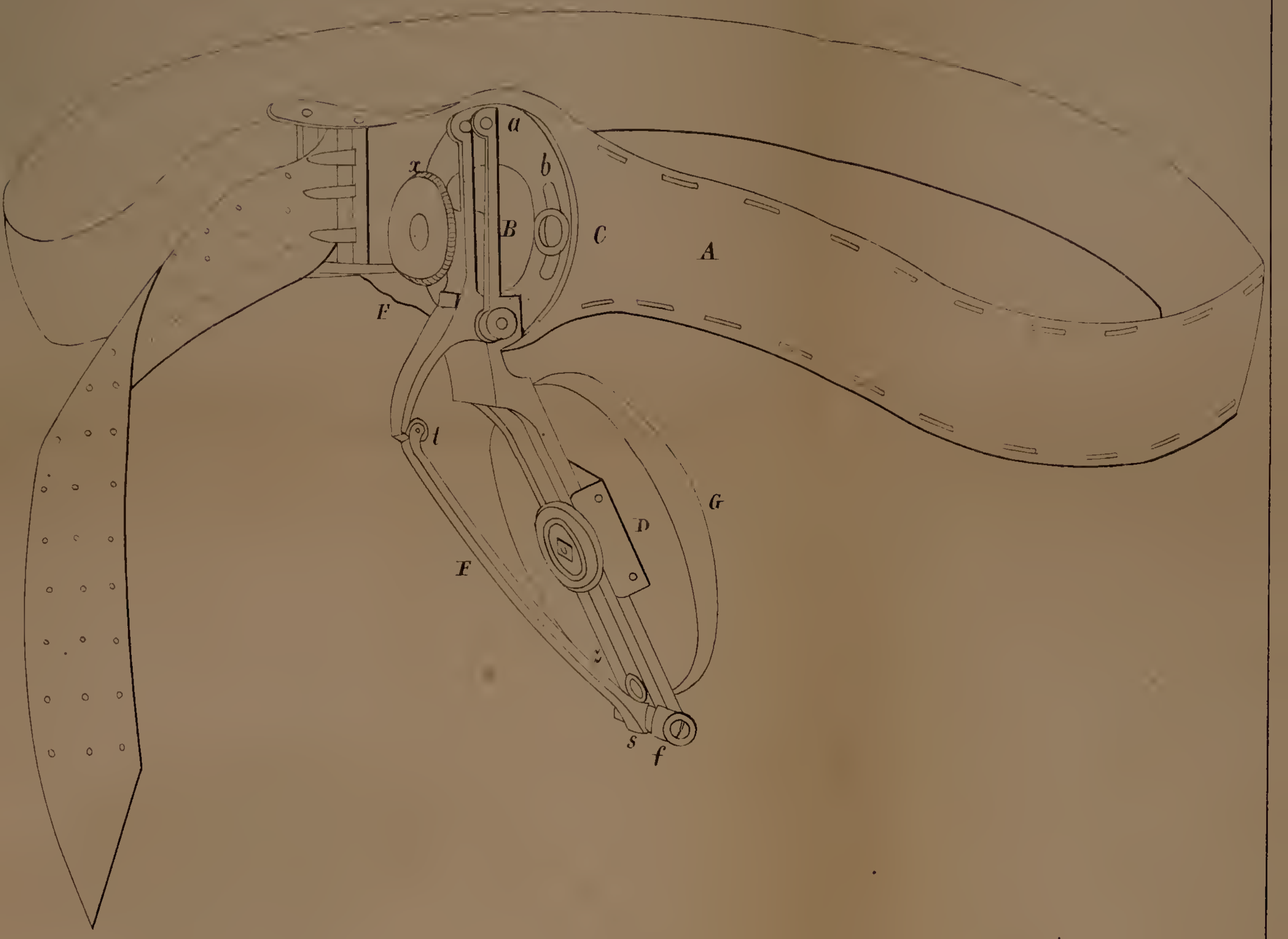


B

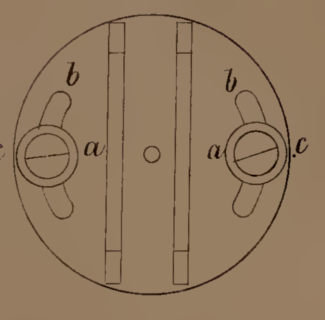


FIG. 1.

C

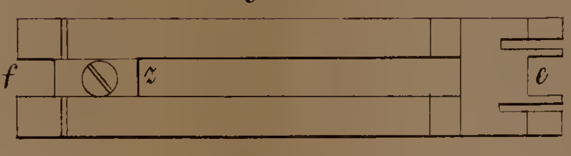


FIG. 1.

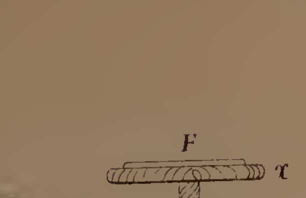


FIG. 2.

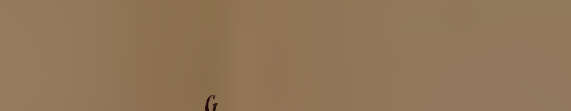
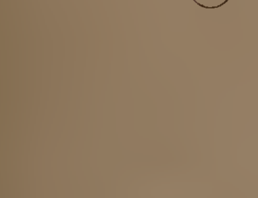


FIG. 2.

FIG. 1.



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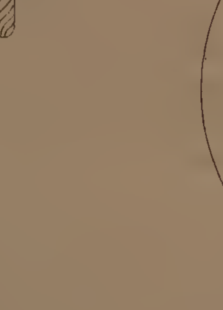
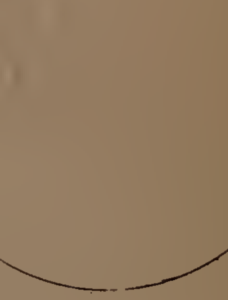


FIG. 3.



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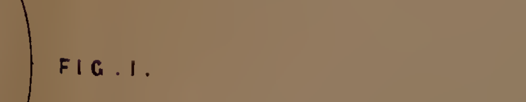
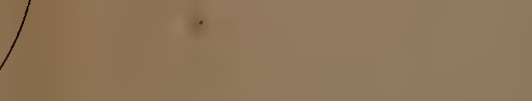
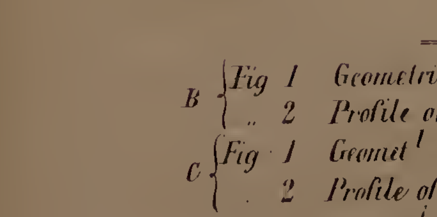


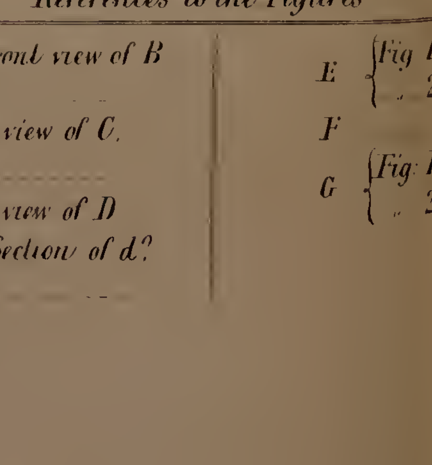
FIG. 2.



F



G



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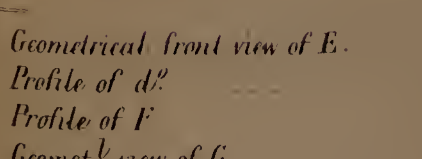

FIG. 2.

## References to the Figures

| | | |
|---|---|---|
| B | Fig 1 | Geometrical front view of B |
| | „ 2 | Profile of d.º |
| C | Fig 1 | Geomet.l front view of C. |
| | „ 2 | Profile of d.º |
| D. | Fig. 1 | Geomet.l front view of D |
| | „ 2 | Longitudinal Section of d.º |
| | „ 3 | Profile of d.º |
| E | Fig 1 | Geometrical front view of E. |
| | „ 2 | Profile of d.º |
| F | | Profile of F |
| G | Fig: 1 | Geomet.l view of G |
| | „ 2 | Section of d.º |

The enrolled drawing is coloured.

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